



*JFW*  
PATENT

Case Docket No. USFMCR.066C2C1C  
Date: May 20, 2004

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s) : Zha, et al.  
Appl. No. : 10/674694  
Filed : 30-Sep-2003  
For : SCOURING METHOD  
Examiner : Unassigned  
Group Art Unit : Unknown

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

\_\_\_\_\_  
*Rose M. Thiessen*  
May 20, 2004  
(Date)

Rose M. Thiessen, Reg. No. 40,202

**TRANSMITTAL LETTER**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Enclosed for filing in the above-identified application are:

- (X) An Information Disclosure Statement.
- (X) A PTO Form 1449 listing two hundred (200) references (fifty (50) references of which are enclosed).
- (X) The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to Account No. 11-1410.
- (X) Return prepaid postcard.

Rose M. Thiessen  
Registration No. 40,202  
Attorney of Record  
Customer No. 20,995  
(619) 235-8550



## INFORMATION DISCLOSURE STATEMENT

Applicant : Zha, et al.  
App. No. : 10/674694  
Filed : 30-Sep-2003  
For : SCOURING METHOD  
Examiner : Unknown  
Group Art Unit : Unknown

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

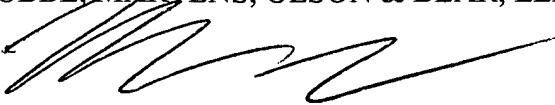
Dear Sir:

Enclosed is form PTO-1449 listing 200 references. Copies of disclosed U.S. patents and/or publications are not included pursuant to PTO waiver of the requirement under 37 C.F.R. § 1.98(a)(2)(i) for applications filed after June 30, 2003. Copies of other references, if listed, are enclosed.

This Information Disclosure Statement is being filed before the receipt of a first Office Action on the merits, and presumably no fee is required in accordance with 37 C.F.R. § 1.97(b)(3). If a first Office Action on the merits was mailed before the mailing date of this Statement, the Commissioner is authorized to charge the fee set forth in 37 C.F.R. § 1.17(p) to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

By: 

Rose M. Thiessen  
Registration No. 40,202  
Attorney of Record  
Customer No. 20,995  
(619) 235-8550

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. USFMCR.066C2C1C	APPLICATION NO. 10/674694
<b>O P E</b> <b>INFORMATION DISCLOSURE STATEMENT</b> <b>BY APPLICANT</b> <small>(USE SEVERAL SHEETS IF NECESSARY)</small>		APPLICANT Zha, et al.	
		FILING DATE September 30, 2003	GROUP Unknown

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
1	10/437,202	05/12/03	Muller			
2	10/674,694	09/30/03	Zha, et al.			
3	10/676,458	09/30/03	Cox, et al.			
4	10/738,628	12/16/03	Muller, et al.			
5	10/759560	01/15/04	Zha, et al.			
6	10/774,041	02/06/04	Zha, et al.			
7	2001-0027951	10/11/01	Gungerich et al.			
8	2002-0148767	10/17/02	Johnson et al.			
9	2002-0153299	10/24/02	Mahendran et al.			
10	2002-0195390	12/26/02	Zha et al.			
11	2003-0075504	04/24/03	Zha et al.			
12	2003-0089659	05/15/03	Zha et al.			
13	2003-0136746	07/24/03	Behman et al.			
14	2003-0141248	07/31/03	Mahendran et al.			
15	2003-0164332	09/04/03	Mahendran et al.			
16	2003-0178365	9/25/03	Zha et al.			
17	2003-0205519	11/06/03	Zha et al.			
18	2003-0226797	12/11/03	Phelps			
19	2003-0234221	12/15/03	Johnson et al.			
20	2004-0000520	11/1/04	Gallagher et al.			
21	3,228,876	01/11/66	Mahon			
22	3,693,406	09/72	Tobin			
23	3,708,071	01/02/73	Richard P. Crowley			
24	3,968,192	06/07/76	Hoffman et al.			
25	3,992,301	11/76	Shippey et al.			
26	4,188,817	02/80	Steigelmann			

EXAMINER	DATE CONSIDERED
<small>*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.</small>	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. USFMCR.066C2C1C	APPLICATION NO. 10/674694
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Zha, et al.	
		FILING DATE September 30, 2003	GROUP Unknown
(USE SEVERAL SHEETS IF NECESSARY)			

## U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
27	4,192,750	03/11/80	Elfes et al.			
28	4,193,780	03/80	Cotton et al.			
29	4,218,324	08/19/80	Hartmann et al.			
30	4,248,648	02/81	Kopp			
31	4,384,474	05/83	Kowalski			
32	4,385,150	05/24/83	Miyake et al.			
33	4,451,369	05/29/84	Sekino et al.			
34	4,511,471	04/85	Müller			
35	4,540,490	09/10/85	Shibata et al.			
36	4,547,289	10/85	Okano et al.			
37	4,609,465	09/02/86	Miller			
38	4,614,109	09/86	Hoffman			
39	4,632,745	12/30/86	Giuffrida et al.			
40	4,636,296	01/13/87	Kunz			
41	4,642,182	02/87	Drori			
42	4,647,377	03/03/87	Miura			
43	4,650,596	03/17/87	Ellis			
44	4,656,865	04/87	Callan			
45	4,660,411	04/87	Reid			
46	4,670,145	06/02/87	Edwards			
47	4,673,507	6/16/87	Brown			
48	4,687,561	08/18/87	Kunz			
49	4,688,511	08/25/87	Gerlach et al.			
50	4,718,270	01/86	Storr			
51	4,744,240	05/88	Reichelt			
52	4,756,875	07/12/88	Tajima et al.			

EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. USFMCR.066C2C1C	APPLICATION NO. 10/674694
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Zha, et al.	
		FILING DATE September 30, 2003	GROUP Unknown
(USE SEVERAL SHEETS IF NECESSARY)			

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
53	4,767,539	8/88	Ford			
54	4,779,448	10/88	Gogins			
55	4,784,771	11/88	Wathen et al.			
56	4,793,932	12/88	Ford et al.			
57	4,797,211	01/89	Ehrfeld et al.			
58	4,810,384	03/07/89	Fabre			
59	4,812,235	03/14/89	Seleman et al.			
60	4,816,160	03/89	Ford et al.			
61	4,846,970	07/89	Bertelsen et al.			
62	4,876,006	10/24/89	Ohkubo et al.			
63	4,876,012	10/24/89	Kopp et al.			
64	4,921,610	05/01/90	Ford et al.			
65	4,931,186	06/05/90	Ford et al.			
66	4,935,143	06/90	Kopp et al.			
67	4,999,038	03/91	Lundberg			
68	5,005,430	04/91	Kibler et al.			
69	5,024,762	06/18/91	Ford et al.			
70	5,066,375	11/19/91	Parsi et al.			
71	5,066,401	11/19/91	Muller et al.			
72	5,066,402	11/91	Anselme et al.			
73	5,069,065	12/91	Sprunt et al.			
74	5,076,925	12/31/91	Roesink et al.			
75	5,079,272	01/07/92	Allegrezza, et al.			
76	5,094,750	03/10/92	Kopp et al.			
77	5,104,535	04/14/92	Cote et al.			
78	5,104,546	04/92	Filson et al.			

EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. USFMCN.066C2C1C	APPLICATION NO. 10/674694
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Zha, et al.	
		FILING DATE September 30, 2003	
(USE SEVERAL SHEETS IF NECESSARY)		GROUP Unknown	

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
79	5,137,631	08/11/92	Eckman, et al.			
80	5,138,870	08/92	Lyssy			
81	5,151,191	09/29/92	Sunaoka et al.			
82	5,151,193	09/29/02	Grobe et al.			
83	5,158,721	10/27/92	Allegrezza, et al.			
84	5,182,019	01/26/93	Cote et al.			
85	5,192,456	3/93	Ishida et al.			
86	5,194,149	03/16/93	Selbie et al.			
87	5,198,116	03/93	Comstock et al.			
88	5,209,852	05/11/93	Sunaoka, et al.			
89	5,211,823	05/18/93	Giuffrida et al.			
90	5,221,478	06/22/93	Dhingra et al.			
91	5,227,063	07/13/93	Langerak, et al.			
92	5,248,424	09/08/93	Cote et al.			
93	5,297,420	03/94	Gilliland et al.			
94	5,320,760	06/14/94	Freund et al.			
95	5,353,630	10/94	Soda et al.			
96	5,361,625	11/94	Ylvisaker			
97	5,364,527	11/15/94	Zimmerman et al.			
98	5,389,260	02/95	Hemp			
99	5,401,401	03/95	Hickok			
100	5,403,479	04/04/95	Smith et al.			
101	5,405,528	04/11/95	Selbie et al.			
102	5,417,101	05/23/95	Weich			
103	5,419,816	05/95	Sampson et al.			
104	5,470,469	11/28/95	Eckman			

EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. USFMCN.066C2C1C	APPLICATION NO. 10/674694
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Zha, et al.	
(USE SEVERAL SHEETS IF NECESSARY)		FILING DATE September 30, 2003	GROUP Unknown

U.S. PATENT DOCUMENTS						
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS
	105	5,477,731	12/26/95	Mouton		
	106	5,480,553	01/02/96	Yamamori et al.		
	107	5,531,848	07/02/96	Brinda et al.		
	108	5,531,900	07/02/96	Raghaven et al.		
	109	5,543,002	08/06/96	Brinda et al.		
	110	5,554,283	09/10/96	Brinda et al.		
	111	5,607,593	03/04/97	Cote et al.		
	112	5,639,373	06/17/97	Mahendran et al.		
	113	5,639,373	06/17/97	Mahendran et al.		
	114	5,643,455	07/01/97	Kopp et al.		
	115	5,783,083	07/21/98	Henshaw et al.		
	116	5,910,250	06/08/99	Mahendran et al.		
	117	5,914,039	06/22/99	Mahendran		
	118	5,918,264	06/29/99	Drummond et al.		
	119	5,942,113	08/24/99	Morimura		
	120	5,944,997	08/31/99	Pedersen et al.		
	121	6,024,872	02/15/00	Mahendran		
	122	6,039,872	03/21/00	Wu et al.		
	123	6,042,677	03/28/00	Mahendran et al.		
	124	6,048,454	04/00	Jenkins		
	125	6,077,435	6/20/00	Beck et al.		
	126	6,083,393	07/07/00	Wu et al.		
	127	6,146,747	11/14/00	Wang et al.		
	128	6,156,200	12/5/00	Zha et al.		
	129	6,159,373	12/00	Beck et al.		
	130	6,193,890	02/27/01	Pederson et al.		

EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. USFMCR.066C2C1C	APPLICATION NO. 10/674694
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Zha, et al.	
		FILING DATE September 30, 2003	GROUP Unknown
(USE SEVERAL SHEETS IF NECESSARY)			

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	131	6,202,475	03/20/01	Selbie et al.			
	132	6,245,239	06/12/01	Cote et al.			
	133	6,254,773	07/03/01	Biltoft			
	134	6,294,039	09/25/02	Mahendran et al.			
	135	6,354,444	03/12/02	Mahendran			
	136	6,440,303	08/02	Spriegel			
	137	6,524,481	2/25/03	Zha et al.			
	138	6,550,747	04/22/03	Rabie et al.			
	139	6,555,005	04/03	Zha et al.			
	140	6,620,319	09/16/03	Behmann et al.			
	141	6,641,733	11/04/03	Zha et al.			
	142	6,645,374	11/11/03	Cote et al.			
	143	D396,046	07/98	Scheel et al.			
	144	D396,726	08/98	Sadr et al.			
	145	D400,890	11/98	Gambardella			
	146	D462,699	09/10/02	Johnson et al.			
	147	D478,913	08/26/03	Johnson, et al.			
	148	D763,612	08/88	Iwanami			
	149	H1,045	05/92	Wilson			
	150	RE37,549	02/19/02	Mahendran et al.			

FOREIGN PATENT DOCUMENTS							TRANSLATION	
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
	151	DE 4 117 422	11/12/92	Germany (English language abstract)				X
	152	EP 920 904 A2	12/12/00	EPO				
	153	EP 0 463 627 B1	05/10/95	EPO				

EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. USFMCR.066C2C1C	APPLICATION NO. 10/674694
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Zha, et al.	
		FILING DATE September 30, 2003	GROUP Unknown
(USE SEVERAL SHEETS IF NECESSARY)			

FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
154		EP 0 763 758 A1	10/02/96	EPO				
155		EP 0 911 073	4/28/99	EPO				
156		EP 1 052 012 A1	11/15/00	EPO				
157		FR 2 674 448 A1	02/10/92	France (English language abstract)				X
158		GB 2 253 572 A	09/16/92	United Kingdom				
159		JP 01-307409	12/89	Japan (abstract only)				X
160		JP 02-164423	06/25/90	Japan (abstract only)				X
161		JP 02-284035	11/21/90	Japan (abstract only)				X
162		JP 03-018373	01/25/91	Japan (abstract only)				X
163		JP 03-028797	02/06/91	Japan (abstract only)				X
164		JP 04-310223	11/02/92	Japan (abstract only)				X
165		JP 05-023557	02/02/93	Japan (abstract only)				X
166		JP 05-157654	06/93	Japan (abstract only)				X
167		JP 06-071120	03/15/94	Japan (abstract only)				X
168		JP 06-114240	04/26/94	Japan (abstract only)				X
169		JP 07-000770	01/06/95	Japan (abstract only)				X
170		JP 07-275665	10/24/95	Japan (abstract only)				X
171		JP 08-010585	01/16/96	Japan (abstract only)				X
172		JP 09-141063	06/06/97	Japan (abstract only)				X
173		JP 10-156149	06/16/98	Japan (abstract only)				X
174		JP 31-010445	05/10/91	Japan (abstract only)				X
175		JP 58-088007	05/26/83	Japan (abstract only)				X
176		JP 61-097006	05/15/86	Japan (abstract only)				X
177		JP 61-107905	05/26/86	Japan (abstract only)				X
178		JP 61-192309	08/26/86	Japan (translation only)			X	
179		JP 61-257203	11/14/86	Japan (abstract only)				X

EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY. DOCKET NO. USFMCR.066C2C1C	APPLICATION NO. 10/674694
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		APPLICANT Zha, et al.	
(USE SEVERAL SHEETS IF NECESSARY)		FILING DATE September 30, 2003	GROUP Unknown

FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
180		JP 61-263605	11/21/86	Japan (abstract only)				X
181		JP 62-004408	01/10/87	Japan (abstract only)				X
182		JP 62-114609	05/26/87	Japan (abstract only)				X
183		JP 62-140607	06/24/87	Japan (abstract only)				X
184		JP 62-179540	08/06/87	Japan (abstract only)				X
185		JP 63-097634	04/28/88	Japan (abstract only)				X
186		JP 63-180254	02/01/90	Japan (abstract only)				X
187		JP 63-143905	06/16/88	Japan (abstract only)				
188		JP 06-343837	12/20/94	Japan (abstract only)				
189		JP 07-185268	07/25/95	Japan (abstract only)				
190		WO 90/00434	01/25/90	PCT				
191		WO 93/02779	02/18/93	PCT				
192		WO 96/41676	12/27/96	PCT				
193		WO 96/07470	03/14/96	PCT				
194		WO 98/22204	05/28/98	PCT				
195		WO 99 59707	11/29/99	PCT				
196		WO 01/36075	05/25/01	PCT				

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)	
197		Derwent Abstract Accession No. 2001-142268/15, Class A88, J01 JP, A1, 2000342932 (Mitsubishi Rayon Co. Ltd.), December 12, 2000.
198		Almulla et al., Desalination 153 (2002) 237-243.
199		Rosenberger et al., Desalination 151 (2002) 195-200.
200		Cote et al., Wat. Sci. Tech. 38(4-5) (1998) 437-442.

S:\DOCS\RMTRMT-3997.DOC  
052004

EXAMINER	DATE CONSIDERED
*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.	